CHEM/BIOL 440: Biochemistry I

Professor: Jeff Watson, HU230A x5929, watsonj@gonzaga.edu
Text: BIOCHEMISTRY, Berg, Tymoczko and Stryer, 6th edition
Lecture: CHEM 440: MWF 10:00-10:50am, JEP 124
         BIOL 440: MWF 1:10-2:00pm, HU 035
Office Hours: Monday and Wednesday, 2:10-4pm. I’m also very happy to make appointments. If I’m in my office, my door is generally open and you’re welcome to stop by unannounced. If the door is closed, please knock. If I can’t meet with you then, we can make an appointment for another time. E-mail is a terrific way to get in touch with me at other times.

Goals of the Class

- To understand an organism’s basic machinery on a molecular level, the interconnectedness of its parts and how the structure and function of proteins are fundamentally related
- To gain an understanding of how and why biochemical phenomena, reactions and pathways occur in the manner they do

Philosophy of the Class

Let’s get something out of the way at the very beginning:

Biochemistry is not an easy subject

It bears repeating. This is not an easy class. There will be a great deal of information covered, and some difficult concepts discussed. For this reason, it is absolutely vital that you come to class and stay current in reading the textbook. Getting behind is a recipe for disaster. Since you’re all intelligent, experienced students, I am not going to give weekly quizzes or pull any other tricks to make you stay current. The responsibility for doing this rests on your shoulders! Homework assignments are meant to supplement the material in the textbook and in lecture.

Simply memorizing names, structures, reactions and so forth will not be enough to do well in this course. Our goal is to understand why things happen the way they do, and memorizing what happens is rarely enough to achieve this goal.

Problem sets will be assigned throughout the semester. These problems are meant to test your basic understanding of details and concepts presented in reading and/or lecture and allow you to practice these things outside the stress of an exam situation. These will tend to be more detail-based, short answer, write-the-structure, fill-in-the-blank-in-this-pathway sorts of questions.
All material covered in lecture, any material from the pertinent sections of the textbook and any additional material handed out in class will be considered fair game for the exams. The final exam will be partly over the material covered after the previous exam and partly cumulative, covering material from the entire class. Before each exam, I will distribute a “study guide” that will outline key topics and concepts to help you focus your study efforts. Exams are almost entirely essay-based and are meant to test your ability to think through a problem or situation and apply the knowledge you’ve gained through reading, lectures and the problem sets. Fair warning: exams are likely to be long. I generally give 55 minutes (an extra 5 minutes at the end) to complete the exam. The second homework assignment is meant to give you an idea of what exam questions will be like, and what good and bad answers look like.

As a general rule, makeup exams will not be given. If you have a legitimate conflict (an unalterable commitment that takes you off-campus, a severe illness), then we can try to make arrangements. I will be the final arbiter of what I consider a legitimate conflict. If you know for certain you will be unable to take an exam, you must come talk to me at least three (3) days prior to the exam.

**Grading and Evaluation**

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 in-class exams</td>
<td>100 points each</td>
</tr>
<tr>
<td>Assigned homework/projects</td>
<td>200 points total</td>
</tr>
<tr>
<td>Final exam</td>
<td>200 points</td>
</tr>
</tbody>
</table>

700 points total

Grades will be assigned based on total points earned and the distribution of scores in the class.